

Claims:

- 5 1. A method for improving the output signal accuracy of a transmitter with a forward branch for converting an input signal into a signal for transmission, the forward branch comprising an adaptation unit (103) for applying a predistortion to the input signal and a power amplifier (106), and with a first feedback
- 10 branch (110), the first feedback branch (110) generating a feedback signal from the signal for transmission, said feedback signal being fed back to the adaptation unit (103), and wherein the predistortion applied to the input signal is determined according to the feedback signal,
- the method comprising the steps of:
- 15 - measuring the output power of said signal for transmission in a second feedback branch (201) and
 - adjusting the predistortion according to said measurement of the output power.
- 20 2. The method according to claim 1, wherein the adjusting according to said measurement is performed on the feedback signal.
3. The method according to claim 1 or 2, wherein said measurement of the output power is performed by an integrating method.
- 25 4. The method according to any of the preceding claims, wherein, in said first feedback branch (110), the frequency of said signal for transmission is down-converted and wherein the down-converted signal is analogue-to-digital converted.
- 30 5. The method according to claim 4 further comprising the steps of:
- converting analogue output power measurement of the second feedback branch to digital values,
 - comparing the analog-to-digital converted signal values of the first feedback branch with the digital values of the measurement,

- deriving a correction factor from said comparison, and
- multiplying said analog-to-digital converted values of the first feedback branch with said correction factor.

- 5 6. The method according to claim 5, wherein said analog-to-digital converted signal values of said first feedback branch are processed by an integrating method before said comparison.
- 10 7. The method according to claim 6, wherein the same time constant is used for integrating the output power measurement of the second feedback branch and for integrating said analog-to-digital-converted signal values of the first feedback branch.
- 15 8. A computer program product comprising program code portions for performing the steps of any of claims 1 to 7 when the computer program product is run on a computing device.
- 20 9. The computer program product of claim 8, stored on a computer readable recording medium.
- 25 10. A transmitter with a forward branch for converting an input signal into a signal for transmission, the forward branch comprising an adaptation unit (103) for applying a predistortion to the input signal and a power amplifier (106), and with a first feedback branch (110), the first feedback branch (110) being adapted to generate a feedback signal from the signal for transmission and being connected to the adaptation unit (103), wherein the adaptation unit (103) is adapted to determine said predistortion according to the feedback signal, characterized in that
- 30 - the transmitter comprises a second feedback (201) branch with a measurement unit (202) for the output power of said signal for transmission, said second feedback branch (201) being connected to the adaptation unit (103), and wherein
- the transmitter is adapted to adjust the predistortion according to said measurement of the output power.

11. The transmitter according to claim 10, wherein said first feedback branch comprises a frequency converter (108) and an analog-to-digital converter (109).

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12. The transmitter according to claim 10 or 11, wherein said measurement unit (202) is an integrating measurement unit.

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13. The transmitter according to any of the claims 10 to 12, wherein said adaptation unit (103) is adapted to adjust the predistortion according to said measurement.

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14. The transmitter according to any of the claims 10 to 13, wherein said adaptation unit (103) is a predistortion unit.